

Dr. M. Krotoszyner presented the specimen of a right-sided pyo-hydronephrotic kidney removed from a physician of 35 years. About five days after the operation a typical herpes zoster appeared in the center of the patient's right femur. This represents the writer's third observation of herpes zoster in connection with unilateral kidney lesions.

2. Dr. M. Krotoszyner also presented a specimen of sarcoma of the right testicle removed from a man of about 30. The painless and uniform swelling of the testicle and epididymis in conjunction with a definite history of lues led, at first, to the diagnosis of a specific orchitis. Upon a vigorous antisyphilitic treatment the testicle, at first, seemed to diminish in size. Shortly after the patient left the hospital he returned with his right testicle markedly increased in size. The castrated testicle, upon examination, was found to represent a sarcoma.

### PROCEEDINGS OF THE ALAMEDA COUNTY MEDICAL SOCIETY.

By A. A. STAFFORD, M. D., Alameda.

#### Treatment of Whooping-Cough.\*

When your Program Committee asked me to present a paper at this meeting I hesitated at selecting for my subject such a common, every-day theme as whooping-cough; but upon a second thought, the very frequency with which the practitioner meets with the disease or some of its complications or sequelae, seemed to justify me in calling to your attention this malady, which I fear, we all are apt to pass over hurriedly as not being worthy of our earnest attention. Thus we lose sight of the fact that we are dealing with a serious disease with very remote and lasting sequelae.

Our patients thereby come to minimize the dangers that lurk behind the name "Whooping-Cough." Little or no effort is made to check the spread of the disease or to protect the child that is liable to infection. The attitude of the public as regards any disease is a reflection of the importance placed upon it by the medical profession. When one sees the gross carelessness as regards care of children with pertussis, and the absence of effort to apply prophylactic measures there is but one conclusion, and that is, that we doctors have not always done our full duty in sending home to our patients' minds the great and lasting dangers that often accompany and follow an attack of whooping-cough in a child.

With a desire to recall to your attention these dangers both present and remote, and to stimulate within all a resolve to give more careful attention to the little patient with pertussis, this subject is presented for your discussion to-night. I will pass over the subject of etiology, because as yet the exciting micro-organism has not been definitely isolated. The question of diagnosis may be dropped with the statement that no one is able to positively identify the disease until the characteristic whoop or inspiratory crow is present. Although the puffy eyes and languid expression in the presence of an epidemic, may make the attending physician fairly certain that he is dealing with more than an ordinary bronchitis; but it always takes the whoop to clinch the diagnosis.

As to prognosis, one should be very guarded, especially when the patient is in the first year of life, or when the child is already a sufferer from rickets, inherited syphilis, tuberculosis, or some other form of malnutrition. Such as these withstand the long strain and exhaustion of whooping-cough very badly.

Bearing in mind these facts of general medical knowledge, please bear with me while we recall a few important known facts appertaining to the disease; yet facts that seem not to be so generally recognized by doctor and laity as they might be. As to mortality due directly to the disease—in the U. S. more than 12,000 children die annually of whooping-

cough, and this does not include those who succumb to some of the remote sequelae of the disease. This is upon the statement of no less an authority than Forchheimer. All authorities upon diseases of children place the mortality in infants under one year at 25%, and I have heard Dr. D. W. Chapin of New York state repeatedly that under six months of age the average city-raised child did not have an even chance of getting well of whooping-cough. Statistics show that the younger the child the greater the tendency to contract the disease, and the more severe is the disease after it is contracted, both as to direct mortality and sequelae. That is—the older the child the less liable it is to contract the disease, also the less liable it is to die of the disease when it has become infected with it.

Now, if these facts are true, then prophylaxis is of supreme importance when dealing with this disease. And right here is one of the weak points in our present indifferent manner in dealing with pertussis. What is the medical profession doing to prevent the spread of a highly infectious and contagious disease that kills 50% of its victims under 6 months old, and 25% of those under a year? We occasionally report the case to a local health board. What does the health board do? The health board makes school children that are infected discontinue school—and that is all. School children are over 6 years old, and have reached a time of life when the mortality rate is only 1% as against 50% in the young infant. I maintain that we are doing next to nothing to protect the young infant who is in such great danger of infection and death from broncho-pneumonia resulting from pertussis. It is in behalf of the new-born infant that we should be very active in our prophylactic measures. We should instruct the parents of these, when the disease prevails, as to the dangers to the young baby.

Our duty is to make the mother know and distinctly understand that when this disease is in the community, that her young infant is in great danger; but that each month she can keep her child away from the disease, its chances of surviving an attack are improving; so that if the child can be carried into the second year it has a much better chance than in the first; and so on with each added year there is improved chance to withstand the infection. I say, let us teach this well to the public by means of private talk and public campaign, and we will not so frequently be called upon to sign a death certificate as a broncho-pneumonia or meningitis or infantile convulsions or tuberculosis with a primary whooping-cough.

Isolation of the child with the disease is very well theoretically as a prophylactic measure, but isolation of the well infant when the disease prevails is of more importance, and this is one point I desire to make. The profession should teach and practice isolation of the young infant when whooping-cough is epidemic. Teach the parents that it is not an ordinary child's disease with no especial danger, as it seems now to be so generally looked upon; but one that carries with it more danger to-day to the young baby than either scarlet fever or diphtheria. Right along this line is an opportunity to reduce our infant mortality which is only second to our opportunity in the line of protecting the babies from bad food. Just as the baby is entitled to our best efforts to keep its food free of infectious bacteria, so also is it deserving of air that is free from infection; but I fear we often forget this. So much for preventive measures.

Now as to treatment of the disease when present—it is not my purpose to recite the long list of drugs that may be used in treatment. None are specific in their action. You each have your favorite remedy. Mine is equinin and urotropin. I am firmly convinced these have a destructive action on the germ causing the catarrhal conditions. I give full doses of equinin and moderate doses of urotropin all during the catarrhal stage, and avoid as far as possible all depressing anti-spasmodics for cough, being especially afraid of these highly efficacious cough rem-

\* Read before the Alameda County Medical Association, Oct. 17, 1911.

edies like bromoform, antipyrin, anti-tussin, etc. Occasionally I resort to belladonna, but not as a rule.

My practice is to tell the mother at once that she must not pin her whole faith to drugs, but that hygienic measures are of supreme importance. This means the child should be just as well nourished as possible all throughout the disease; that it should have pure, out-door air that is free from dust for 24 hours a day; that it should be in the sunshine as much as possible; and that it should avoid other children and violent exercises and causes of nerve irritation which incite paroxysms of coughing; and then, how to carry out in detail these measures, is carefully explained to her. The child is put through a careful lung examination at least every 5 days. If evidence of a deep bronchitis or bronchiolitis is discovered, it is put to bed and kept at rest in pure open air until danger of broncho-pneumonia has passed by. Proper treatment for capillary bronchitis means early treatment of the condition.

This means that we must see these patients often and watch carefully the general condition of the child as well as to know at all times the conditions in the respiratory tract. It is not sufficient care of the whooping-cough infant to give the mother a few general directions as to hygiene, and tell her that doctors and medicines can do no good, the disease must run its course; and let her go. In many cases, such a course will mean that later the doctor will be called in to treat a terminal pneumonia which might have been avoided had he been in close touch with the patient all along, and had known how the patient was standing the disease.

It is not my desire to recite in detail how to treat the paroxysm of cough, or how to care for the stomach of the child that loses all its food by vomiting. You all know these details. But let me urge the importance of great ventilation of the patient's sleeping-room, of the daily sunning and airing of the bedding, of the maintaining the patient's general condition all along at the highest possible point, by good food, fresh air and sunshine.

And finally, I urge more watchful care of these small patients with whooping-cough, and far greater activity in preventing them from being exposed to this severe infectious disease.

#### Intestinal Intoxication in Infants.\*

By FLORENCE M. SYLVESTER, M. D., Oakland.

As one looks over the recent literature on intestinal intoxication in infants, one thing stands out prominently: the lack of harmony in the different theories advanced to find its cause. There is a great variety of causes suggested, and the inaccuracy of terms leads to many misunderstandings. From some few carefully observed phenomena general conclusions are arrived at, and on these are based entire systems of treatment. No sooner have we accepted an apparently well founded theory, but some one else will single out another symptom, and group about that a whole school of investigators, whose writings will upset all our notions about feeding for a time, until we settle down again with some new method. There surely is need for some practical clarification in the great mass of apparently contradictory data that are accumulating about the digestive disturbances of infants.

The most common intoxications are probably due to wrong feeding. For these satisfactory treatments have been evolved. As Czerny puts it: The problem of artificial feeding is solved for disturbances of alimentation, but not for those from infection or constitutional anomalies of absorption.

Secondly, we have intoxications due to bacterial action. From these we may eliminate for to-day's discussion the enteric infections, such as dysentery, cholera, typhoid, etc., whose main attack is local, and which have a definite symptom complex; also

the parenteral infections, such as grippe, pneumonia, etc., in which the intestinal disorder is entirely secondary.

That leaves for our consideration those bacterial intoxications, from absorption of products of decomposition, which are due to excessive putrefaction in the large intestine, the actual alimentary toxicoes. Herter<sup>1</sup> divides these into three distinct clinical types:

1. The indolic type, which shows us the marantic form of chronic indigestion in children with large abdomen, sweating of the head, and retarded physical growth. These children always show indican in the urine, due to the action of bacillus coli and bacillus putrificus. It is common in partial occlusion of the common bile duct or of the small intestine, and in functional pancreatic achylia. In the stools bacillus bifidus always dominates over the bacillus coli. This type has very great similarity with that of infantilism, which he describes more in detail in a later work, but no direct transition between the two has been observed.

2. The second, the saccharo butyric type, is much more common in adults, and leads to chronic invalidism. The bacillus aerogenes capsulatus is the most prominent organism; the stools are of light color, and have a definite odor of butyric acid. There is slow anemia, due to the hemolytic action of extract of the feces, and there is definite damage to the mucosa.

3. The third type is a combination of the two, in which anacrobos predominate, and there is persistent high indicanuria. These are the cases that show irritability, or mental depression, marked mental and muscular fatigue, and haemic disturbances. Peripheral neuritis, melancholia and other psychoses may be caused by enterogenic poisons. Probably there are also parenchymatous changes in liver and kidneys.

4. The most interesting of the conditions described by him is that of infantilism,<sup>2</sup> which is characterized by a retardation in the growth of the body, including the skeleton, with a relatively fair development of the brain.

These two points mentioned are the most important of the clinical features; associated with them we often find marked abdominal distention due to a partial paralysis of the gut, and without much flatus; a moderate anemia; a rapid onset of fatigue both mental and muscular, due to chronic intoxication, which allows the muscles to become weak and flabby, and usually some disturbance of intestinal function like diarrhea or fatty stools. There is often a sweating of the head, excessive appetite and thirst, associated with increase in urine, subnormal temperature, tendency to urticaria, marked nervous instability, sometimes even petti mal, and occasionally rickets.

The characteristic feature in every case is the fact that the bacterial flora of the colon is the same as that of the nursing. Escherich calls it "Blaue Bacillose," as the Grampositive, blue rods predominate in the smear. They are mainly: bacillus bifidus, described by Tissier, productive of lactic acid; bacillus infantilis, which checks the growth and gas production of bacillus coli, and forms volatile bases, especially ammonia, and coccal forms. Bacillus coli and lactic aerogenes are very infrequent, but begin to appear with recovery.

The urine shows marked indicanuria, an excess of phenol in the distillate, aromatic oxyacids, the Diazo reaction, and indolacetic acid.

The intestinal contents show an abundance of fatty acid crystals. There are many phenolic substances, indol, hydrogen sulphid, indolacetic acid, and aromatic oxyacids, but skatol is never present. There is no calcium retention, and sometimes even a calcium loss; in one case the absorption was one-tenth as much as in a normal child. The fat loss is very evident in the marked increase in fatty acids and soaps. While the normal absorption of fat is from 92-98%, these cases fall as low as 85 or even

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